Educational and Training Classifications

Occupations in this publication are classified into categories that describe the education and training needed by most workers to become fully qualified. The U.S. Bureau of Labor Statistics developed this classification system and assigned occupations into 1 of 11 categories. Some adjustments have been made by the Missouri Economic Research and Information Center's staff to reflect training requirements in Missouri. The education and training categories are:

(01) Professional Degree – Completion of a professional degree usually requires at least 6 years of full-time equivalent academic study, including college study prior to entering the professional degree program. Occupations in this category are:

32113	Chiropractors	32108	Optometrists
27502	Clergy	32517	Pharmacists
32105	Dentists	32102	Physicians and Surgeons
32199	Health Practitioners, NEC	32111	Podiatrists
28108	Lawyers	32114	Veterinarians

(02) Doctoral Degree – Completion of a doctoral degree program usually requires at least 3 years of full-time equivalent academic work beyond a bachelor's degree. Occupations in this category are:

31201 Agric Sciences Teachers, Postsecondary 31231 Anthrop/Sociology Teachers, Postsecond 31223 Architecture Teachers, Postsecondary 31232 Area/Ethnic/Cultural Studies Teachers 31218 Art/Drama/Music Teachers, Postsecondary 24308 Biological Scientists 31242 Business Teachers, Postsecondary 31204 Chemistry Teachers, Postsecondary 31213 Communications Teachers, Postsecondary 31226 Computer Science Teachers, Postsecond 31246 Criminal Justice/Law Enforce Teachers 31233 Economics Teachers, Postsecondary 31252 Education Teachers, Postsecondary 31252 Engineering Teachers, Postsecondary 31214 English Lang/Lit Teachers, Postsecondary 31215 Foreign Lang/Lit Teachers, Postsecondary 31234 Geography Teachers, Postsecondary	31235 History Teachers, Postsecondary 31262 Home Economics Teachers, Postsecondary 31244 Law Teachers, Postsecondary 31256 Library Science Teachers, Postsecondary 31202 Life Sciences Teachers, Postsecondary 24399 Life Scientists, NEC 31224 Math/Science Teachers, Postsecondary 25310 Mathematical Scientists 24311 Medical Scientists 31258 Parks/Rec/Fitness Studies Teachers 31254 Philosophy/Religion Teachers, Postsecond 31209 Phys Science Teachers, Postsecond, NEC 31206 Physics Teachers, Postsecondary 31236 Political Science Teachers, Postsecondary 31237 Psychology Teachers, Postsecondary 31239 Social Science Teachers, Postsecond, NEC
31234 Geography Teachers, Postsecondary	31239 Social Science Teachers, Postsecond, NEC
31211 Health Diagnostics Teachers, Postsecond 31212 Health Specialties Teachers, Postsecondary	31247 Social Work Teachers, Postsecondary



(03) Master's Degree – Completion of a master's degree program usually requires 1 or 2 years of full-time equivalent study beyond a bachelor's degree. Occupations in this category are:

31514 Counselors, Vocation/Education	27108 Psychologists
31511 Curators/Archivists/Museum Technicians	27199 Social Scientists, NEC
31502 Librarians	27302 Social Workers, Medical/Psychiatric
25319 Mathematical Scientists, NEC	32314 Speech Pathologists/Audiologists
31114 Nursing Instructors	25312 Statisticians
25302 Operations Research Analysts	27105 Urban & Regional Planners
32308 Physical Therapists	

(04) Work experience, plus a Bachelor's Degree or higher – This category includes positions that generally require work experience in an occupation that requires a bachelor's degree or higher. Most jobs in this category are managerial with experience required in a related non-managerial position. Occupations in this category are:

28105	Adjudicators & Hearing Officers	19005	General Managers & Top Execs
13014	Administrative Services Managers	19002	Govt Chief Execs & Legislators
13011	Adver/Marketing/Promo/PR/Sales Mgr	13005	Human Resources Managers
34035	Artists & Commercial Artists	28102	Judges & Magistrates
34014	Broadcast News Analysts	21905	Management Analysts
15023	Communication/Transp/Utilities Mgrs	19999	Managers & Administrators, NEC
15005	Education Administrators	15008	Medical/Health Service Managers
13017	Engineer/Nat Sci/Computer Info Sys Mgrs	13008	Purchasing Managers
13002	Financial Managers		

(05) Bachelor's Degree – Completion of a bachelor's degree program usually requires 4 or 5 years of full-time academic work. Occupations in this category are:

21114	Accountants & Auditors	22127	Computer Engineers
25313	Actuaries	25105	Computer Programmers
22102	Aerospace Engineers	25199	Computer Scientists, NEC
22123	Agricultural Engineers	24302	Conservation Scientists/Foresters
24305	Agricultural/Food Scientists	15017	Construction Managers
97702	Aircraft Pilots/Flight Engineers	32311	Corrective/Manual Arts Therapists
22302	Architects, Exc Landscape/Naval	21902	Cost Estimators
21917	Assessors	21105	Credit Analysts
24108	Atmospheric & Space Scientists	63028	Criminal Investigators, Public Service
31508	Audio-Visual Specialists	25103	Database Administrators
21117	Budget Analysts	34038	Designers, Exc Interior
22114	Chemical Engineers	32521	Dietitians & Nutritionists
24105	Chemists	27505	Directors, Religious Activities/Education
22121	Civil Engineers	27102	Economists
21921	Claims Examiners Prop/Casual Insurance	22126	Electrical & Electronics Engineers



21508 Employment Interviewers 22199 Engineers, NEC 31323 Farm/Home Management Advisors 34032 Film Editors 25315 Financial Analysts, Statistical 21199 Financial Specialists, NEC 24111 Geologists/Geophysicists/Oceanographers 31117 Graduate Assistants, Teaching 21511 Human Res/Train/Labor Relations Specs 22128 Industrial Engineers, Exc Safety 15014 Industrial Production Managers 31517 Instructional Coordinators 43002 Insurance Sales Agents 21102 Insurance Underwriters 34041 Interior Designers 22308 Landscape Architects 31111 Lecturers	15011 Property/Real Est/Comm Assoc Mgrs 34008 Public Relations Specialists 21305 Purchasing Agents & Buyers, Farm 21308 Purchasing Agts, Exc Whlsale/Retail/Farm 43011 Real Estate Appraisers 27311 Recreation Workers 32317 Recreational Therapists 27599 Religious Workers, NEC 34011 Reporters & Correspondents 27307 Residential Counselors 22132 Safety Engineers, Exc Mining 49002 Sales Engineers 43014 Securities/Finance Serv Sales Agents 27305 Social Workers, Exc Medical/Psychiatric 21505 Special Agents, Insurance 22311 Surveyors and Mapping Scientists 25102 Systems Analysts
22128 Industrial Engineers, Exc Safety	27307 Residential Counselors
15014 Industrial Production Managers	22132 Safety Engineers, Exc Mining
31517 Instructional Coordinators	49002 Sales Engineers
43002 Insurance Sales Agents	43014 Securities/Finance Serv Sales Agents
21102 Insurance Underwriters	27305 Social Workers, Exc Medical/Psychiatric
34041 Interior Designers	21505 Special Agents, Insurance
22308 Landscape Architects	22311 Surveyors and Mapping Scientists
31111 Lecturers	25102 Systems Analysts
21108 Loan Counselors & Officers	21914 Tax Examiners/Collectors/Revenue Agents
21999 Management Support Workers, NEC	31399 Teachers & Instructors, NEC
22138 Marine Engineers	31305 Teachers, Elementary School
22105 Materials Engineers	31304 Teachers, Kindergarten
22135 Mechanical Engineers	31303 Teachers, Preschool
32902 Medical/Clinical Lab Technologists	31308 Teachers, Secondary School
22108 Mining Engineers, Inc Safety	31311 Teachers, Special Education
22117 Nuclear Engineers	34005 Technical Writers
32305 Occupational Therapists	32399 Therapists, NEC
24199 Physical Scientists, NEC	21302 Wholesale/Retail Buyers, Exc Farm
32511 Physician Assistants	34002 Writers & Editors
39999 Professional/Paraprofess/Techs, NEC	

(06) Associate's Degree – Completion of an associate's degree program usually requires at least 2 years of full-time academic study. Occupations in this category are:

	•		
24502	Biological/Agric Techs/Technologists	22508	Industrial Engineering Techs/Technols
32925	Cardiology Technologists/Technicians	28302	Law Clerks
24505	Chemical Techs/Technologists, Exc Health	28399	Legal Assistants, NEC
22502	Civil Engineering Techs/Technologists	25323	Mathematical Technicians
25104	Computer Support Specialists	22511	Mechanical Engineering Techs/Technols
32908	Dental Hygienists	32911	Medical Records/Health Info Technicians
32523	Dietetic Technicians	32905	Medical/Clinical Lab Technicians
22505	Elect & Electronic Techs/Technologists	32914	Nuclear Medical Technologists
22599	Engineering Techs/Technologists, NEC	66021	Occupational Therapy Assistants/Aides
39011	Funeral Directors & Morticians		Paralegals & Legal Assistants
32999	Health Professionals/Paraprofess, NEC	24511	Petroleum Technicians/Technologists



66017 Physical Therapy Assistants/Aides	32502 Registered Nurses
24599 Physical/Life Science Technicians, NEC	32302 Respiratory Therapists
32913 Radiation Therapists	32951 Veterinary Technologists/Technicians
32919 Radiologic Technicians/Technologists	

(07) Vocational Education – Some vocational education programs last only a few weeks while others may last more than a year. In some occupations, a license is needed that requires passing an examination after completion of the training. Occupations in this category are:

85326	Aircraft Engine Specialists	22517	Estimators & Drafters, Utilities
85323	Aircraft Mechanics	85505	Frame Wirers, Central Office
85302	Auto Mechanics/Service Technicians	68005	Hairdressers/Hairstylists/Cosmetologists
68002	Barbers	89123	Jewelers & Silversmiths
34028	Broadcast & Sound Technicians	55102	Legal Secretaries
85502	Central Office/PBX Installers/Repairers	32505	Licensed Practical/Voc Nurses
85599	Communication Equip Mechanics, NEC	68008	Manicurists
25108	Computer Programmer Aides	55105	Medical Secretaries
55302	Court Reporters/Medical Trans/Stenos	34023	Photographers
34053	Dancers & Choreographers	32931	Psychiatric Technicians
85705	Data Processing Equip Repairers	85514	Radio Mechanics
22514	Drafters	43008	Sales Agents, Real Estate
85708	Electronic Home Entertain Equip Reprs	85726	Station Installers/Repairers, Telephone
85714	Electric Motor/Transform Repairers	32928	Surgical Technologists
85728	Electrical Installers/Reprs, Transp Equip	85508	Telegraph/Teletype Installers/Repairers
85717	Electronics Reprs, Commercial/Ind Equip	43021	Travel Agents
32508	Emergency Medical Techs/Paramedics		

(08) Work experience in a related occupation – Occupations in this category require skills and experience gained in a related position, developed from hobbies or other activities or from service in the Armed Forces. Many of these jobs are supervisory or managerial. Occupations in this category are:

93102	Aircraft Assemblers, Precision	81008	First Line Supervisors: Production/Opers
81099	Blue-Collar Worker Supervisors, NEC	81011	First Line Supervisors: Transportation
43005	Brokers, Real Estate	93108	Fitters, Structural Metal, Precision
97502	Captains, Water Vessels	15026	Food Service & Lodging Managers
21908	Construction, Building Inspectors	63005	Forest Fire Inspectors/Prev Specialists
89505	Custom Tailors & Sewers	21911	Inspectors & Compliance Officers
93114	Elec/Electronic Equip Assemblers, Prec	83002	Inspectors/Testers/Graders, Precision
93111	Electromechanical Equip Assemblers	83005	Inspectors/Testrs/Gradrs/Samplrs/Weighrs
61002	Fire Fighting/Prevention Supervisors	83099	Inspectors/Testers/Related, NEC
63002	Fire Inspectors	61008	Institution Cleaning Supervisors
72002	First Line Supervisors: Ag Serv, Forestry	31317	Instructors, Adult (Non-Voc Ed)
81005	First Line Supervisors: Construct/Extract	15032	Lawn Service Managers
81017	First Line Supervisors: Helpers/Laborers	97305	Locomotive Engineers
81002	First Line Supervisors: Mechanics/Repair	93105	Machine Builder Assemblers, Precision



41002 Marketing/Sales Supervisors	15002 Postmasters/Mail Superintendents
97505 Mates: Ship/Boat/Barge	93197 Precision Assemblers, Metal, NEC
15021 Mining & Related Managers	63035 Private Detectives/Investigators
53105 New Accounts Clerks, Banking	97308 Rail Yard Engineers/Dinkey Opers
25111 Numerical Tool/Process Control Progrms	97317 Railroad Brake/Signal/Switch Opers
15031 Nursery & Greenhouse Managers	97302 Railroad Conductors/Yardmasters
51002 Office/Admin Support Supervisors/Mgrs	61099 Service Supervisors/Mgrs, NEC
97508 Pilots, Ship	97521 Ship Engineers
63011 Police Detectives	31314 Teachers/ Instructors, Voc Ed/Training
61005 Police/Detective Supervisors	83008 Transportation Inspectors

(09) Long-term on-the-job training – This category includes occupations that usually require more than 12 months of on-the-job training or combined work experience and formal classroom instruction, such as apprenticeships and employer-sponsored training. Individuals undergoing training are usually considered employed in the occupation. Occupations in this category are:

34056 Actors/Directors/Producers	85723 Electric Powerline Installers/Repairers
39002 Air Traffic Controllers	85799 Electric/Electronic Equip Mechanics, NEC
79015 Animal Breeders	87202 Electricians
79016 Animal Trainers	85932 Elevator Installers & Repairers
34058 Athletes/Coaches/Umpires/Rel Workers	89128 Etchers/Engravers, Hand/Mach, Precision
85305 Automotive Body & Related Repairers	87905 Explosive Wkrs/Ord Hdlg Exprts/Blasters
95023 Auxiliary Equipment Opers, Power	85321 Farm Equipment Mechanics
63023 Bailiffs	89717 Film Strippers, Printing
89135 Boilermakers	63008 Fire Fighters
87302 Brickmasons/Blockmasons	68026 Flight Attendants
85311 Bus/Truck/Diesel Engine Mechanics	89902 Foundry Mold/Core Makers, Prec
65023 Butchers & Meatcutters, Retail	89314 Furniture Finishers
89311 Cabinetmakers/Bench Carpenters	85944 Gas Appliance Repairers
89713 Camera Operators	95005 Gas Plant Operators
87102 Carpenters	87811 Glaziers
95008 Chemical Plant & System Opers	89126 Hand Workers, Jewelry, Precision
85947 Coin/Vending/Amuse Mach Servicers	87308 Hard Tile Setters
89702 Compositors/Typesetters, Precision	85902 Heating/AC/Refrig Mechanics/Installers
87311 Concrete Finish/Cement/Terrazzo Wkrs	85110 Industrial Machinery Mechanics
87941 Continuous Mining Mach Opers	89105 Instrument Makers, Precision
65028 Cooks, Institution/Cafeteria	53302 Insurance Adjustrs/Examinrs/Investigators
65026 Cooks, Restaurant	53305 Insurance Appraisers, Auto Damage
63017 Correctional Officers	89705 Job Printers
89921 Dental Lab Technicians, Precision	89117 Layout Workers, Metal, Precision
89707 Desktop Publishing Specialists	89719 Lithog/Photoengraving Occs, NEC
89911 Detail Design Decorators/Painters	85118 Mach Maint Mechanics: Water/Power
85711 Electric Home Appl/Power Tool Repairers	85119 Machinery Maintenance Mechanics, NEC
85911 Electric Meter Installers/Repairers	85116 Machinery Maint Mechanics: Marine



Appendix B

85113	Machinery Maint Mechanics: Sewing	63014	Police Patrol Officers
85112	Machinery Maint Mechanics: Textile	95028	Power Distributors/Dispatchers
85128	Machinery Maintenance Workers	95021	Power Generating Plant Operators
89108	Machinists	95026	Power Reactor Operators
85132	Maintenance Repairers, General Utility	85721	Power/Substation/Relay Electricians
85928	Mechanical Control Installers/Repairers	85905	Precision Instrument Repairers
85999	Mechanics/Installers/Repairers, NEC	89199	Precision Metal Workers, NEC
89923	Medical Appliance Makers	89799	Precision Printing Workers, NEC
85908	Medical Equipment Repairers	89599	Precision Textile Workers, NEC
85956	Menders/Garments/Linens/Related	89399	Precision Woodworkers, NEC
85123	Millwrights	89999	Precision Workers, NEC
87943	Mine Cutting/Channeling Mach Opers	89517	Pressers, Delicate Fabric
85117	Mine Machinery Mechanics	85317	Rail Car Repairers
	Mobile Heavy Equipment Mechanics	85935	Riggers
85938	Mobile Home Repairers	89715	Scanner Operators
89905	Molders/Shapers, Exc Jewelry/Foundry		Sheriffs & Deputy Sheriffs
	Motorcycle Mechanics		Shipfitters
	Music Directors/Singers/Related Workers		Shoe/Leather Workers/Repairers, Precision
	Musical Instrument Repairers/Tuners		Signal/Track Switch Maintainers
	Musicians, Instrumental		Small Engine Mechanics
	Office Mach/Cash Register Servicers		Stationary Engineers
	Ophthalmic Laboratory Technicians		Stonemasons
	Paste-Up Workers		Structural Metal Workers
	Pattern & Model Makers, Metal		Telephone/Cable TV Installers/Repairers
	Pattern/Model Makers, Wood		Tool & Die Makers
	Patternmakrs/Layout Wkrs, Fabric/Apparel		Tool Grinders/Filers/Sharpeners
	Patternmakers/Model Makers/Rel Wkrs		Transit & Railroad Police
	Photoengravers		Upholsterers
	Plant & System Operators, NEC		Watch Repairers
	Plasterers & Stucco Masons		Water & Waste Treat Plant Opers
	Platemakers		Welders & Cutters
87502	Plumbers/Pipefitters/Steamfitters	89308	Wood Machinists

(10) Moderate-term on-the-job training – Occupations in this category generally require 1 to 12 months of combined on-the-job experience and informal training before workers develop the skills needed for average job performance. Occupations in this category are:

34021 34017 65021 89805	Air Hammer Operators Announcers, NEC Announcers, Radio & TV Bakers, Bread & Pastry Bakers, Manufacturing Bicycle Repairers	92926 89721 55338 97802	Bindery Machine Setters/Opers Boiler Opers/Tenders, Low Pressure Bookbinders Bookkeeping/Accounting/Auditing Clerks Bridge/Lock/Lighthouse Tenders Brokerage Clerks
			Brokerage Clerks Bus Drviers, Transit/Intercity



Appendix B

34026	Camera Opers, TV/Motion Picture/Video	39014	Embalmers
	Camera/Photographic Equip Repairers	93951	Engraving & Printing Workers, Hand
	Carpet Installers		Exavation/Loading Mach Opers
	Ceiling Tile Installers/Acoustic Carpenters		Extraction Workers, Exc Helpers, NEC
	Cement/Gluing Mach Opers/Tenders		Extrude/Drawing Setters/Opers, M/P
	Central Office Operators		Extrude/Form/Press Mach Opers/Tenders
	Chemical Equip Controllers/Opers		Extruding/Form/Press Mach Setters/Opers
	Chemical Equipment Tenders		Extruding/Forming Mach Opers/Tenders
	Claims Takers, Unemployment Benefits		Fence Erectors
	Clean/Wash/Pickling Equip Opers/Tenders	63041	Fish & Game Wardens
	Coat/Paint/Spray Mach Opers/Tenders		Floor Layers, Exc Carpet/Wood/Hard Tile
	Coat/Paint/Spray Mach Setters/Opers		Food Batchmakers
	Comb Mach Tool Opers/Tenders, M/P	91317	Forging Machine Setters/Opers, M/P
	Comb Mach Tool Sttrs/Set-Up Opers, M/P		Foundry Mold Assembly/Shakeout Wkrs
	Communication Equip Operators, NEC		Furnace Operators & Tenders
	Computer Opers, Exc Peripheral Equip		Furnace/Kiln/Oven/Drier/Kettle Opers
	Construction Trades Workers, NEC		Gas Compressor Operators
	Construction/Extractive Workers, NEC		Gas Pumping Station Operators
97951	Conveyor Operators/Tenders		Grader/Bulldozer/Scraper Opers
92917	Cooking Mach Opers, Food/Tobacco	91114	Grinding Mach Setters/Opers, M/P
	Cooling/Freezer Equip Opers/Tenders		Hazardous Materials Removal Workers
	Crane & Tower Operators	92305	Head Sawyer
92965	Crush/Grind/Mix Mach Opers/Tenders	91932	Heat Treat/Annealing/Temper Mach Opers
92944	Cutting/Slicing Machine Opers/Tenders	91938	Heaters, Metal/Plastic
92941	Cutting/Slicing Machine Setters/Opers	91928	Heating Equip Setters/Opers, M/P
92932	Dairy Process Equip Opers/Setters	97941	Hoist & Winch Operators
56021	Data Entry Keyers, Composing		Instructors/Coaches, Sports/Physical Train
56017	Data Entry Keyers, Exc Composing	87802	Insulation Workers
49034	Demonstrators/Product Promoters	53311	Insurance Claims Clerks
66002	Dental Assistants	53308	Insurance Examining Clerks
57105	Directory Assistance Operators	53314	Insurance Policy Process Clerks
	Dispatchers, Exc Police/Fire/Ambulance	91105	Lathe/Turning Mach Setters/Opers, M/P
58002	Dispatchers: Police/Fire/Ambulance	87114	Lathers
97926	Dragline Operators	92726	Laundry/Drycleaning Mach Opers
97928	Dredge Operators/Dipper Tenders	92515	Letterpress Operators
91108	Drilling/Boring Mach Setters/Opers, M/P	97932	Loading Mach Opers, Mining
87108	Drywall Installers	85923	Locksmiths & Safe Repairers
87902	Earth Drillers, Exc Oil & Gas	97311	Locomotive Firers
32926	EKG Technicians	73008	Log Handling Equipment Operators
	Electro Plating/Coat Mach Opers, M/P		Logging Tractor Operators
	Electro Plating/Coat Mach Setters/Opers		Machine Forming Opers/Tenders, M/P
	Electroneurodiagnostic Technicians		Machine Operators/Tenders, NEC
92902	Electronic Semiconductor Processors	92997	Machine Setters/Setup Opers, NEC



Education Criteria

Appendix B

91117	Machine Tool Cutting Opers, M/P	92519	Printing Press Setters/Opers, NEC
	Main Line Station Engineers		Printing Setters/Operators, NEC
	Material Moving Equip Opers, NEC		Printing/Binding/Related Workers, NEC
	Medical Assistants		Pump Operators
	Merch Displayers/Window Dressers		Punching Mach Setters/Opers, M/P
	Metal Fabricators, Structural Metal		Radio Operators
	Metal Mold/Core/Cast Mach Opers/Tndrs		Rail Transportation Workers, NEC
	Metal Mold/Core/Cast Mach Setters		Rail-Track Laying/Maint Equip Opers
93941	Metal Pourers/Casters, Basic Shape		Refractory Material Repairers
	Metal/Plastic Mach Opers/Tenders, NEC		Reinforcing Metal Workers
	Metal/Plastic Mach Setters/Opers, NEC		Roasting/Dryng Opers/Tenders, Fd/Tob
	Milling/Planing Mach Setters/Opers, M/P		Rock Splitters, Quarry
	Mining Mach Operators, NEC		Rolling Machine Setters/Opers, M/P
	Models		Roof Bolters, Mining
93944	Molders & Casters, Hand		Roofers
	Motorboat Operators	49999	Sales & Related Workers, NEC
91926	Nonelectro Plating/Coat Mach Opers		Sales Agents, Advertising
91923	Nonelectro Plating/Coat Mach Setters		Sales Agents, Business Services
91502	Numerical Control Mach Opers, M/P	49008	Sales Reps, Mfg and Wholesale
92512	Offset Lithographic Press Opers	49005	Sales Reps, Scientific Products/Services
97956	Operating Engineers		Sales Reps/Salespersons, Services NEC
32514	Opticians, Dispensing	92302	Sawing Mach Setters/Set-Up Opers
92974	Packaging/Filling Mach Opers/Tenders	91102	Sawing Mach Tool Setters/Opers, M/P
87402	Painters & Paperhangers	92308	Sawing Machine Opers/Tenders
92947	Painters, Transportation Equip	92524	Screen Printing Mach Setters/Opers
92914	Paper Goods Machine Setters/Opers	55108	Secretaries, Exc Legal or Medical
49014	Parts Salespersons	92962	Separating/Still Mach Setters/Opers
87708	Paving/Surfacing/Tamping Opers	87511	Septic Tank Servicers/Sewer Pipe Cleaner
56014	Peripheral Equipment Operators	92717	Sewing Machine Opers, Garment
67008	Pest Controllers Workers	92721	Sewing Machine Opers, Non-Garment
32518	Pharmacy Technicians	91308	Shear Mach Setters/Opers, M/P
	Photoengrav/Lithog Mach Opers/Tenders		Sheet Metal Duct Installers
89914	Photographic Process Workers, Precision	89132	Sheet Metal Workers
87705	Pile Driving Equipment Operators	92723	Shoe Sewing Machine Opers/Tenders
	Pipelayers		Slaughterers & Meat Packers
	Pipelaying Fitters		Social/Human Service Assistants
	Plastic Mold/Cast Mach Opers/Tenders		Soldering/Brazing Mach Opers/Tenders
	Plastic Mold/Cast Mach Setters/Opers		Soldering/Brazing Mach Setters/Opers
	Precision Food/Tobacco Workers, NEC		Specialty Material Printing Mach Setters
	Press Mach Setters/Opers, M/P		Spotters, Dry Cleaning
	Pressing Mach Opers/Tenders, Textiles		Sprayers/Applicators
	Print Press Machine Setters		Statistical Clerks
92543	Printing Press Mach Opers/Tenders	97314	Subway & Streetcar Operators



22521	Surveying/Mapping Technicians	28308	Title Searchers
97905	Tank Car & Truck Loaders	39005	Traffic Technicians
87111	Tapers	97999	Transp/Material Move Equip Opers, NEC
21111	Tax Preparers	97899	Transportation Workers, NEC
57111	Telegraph/Teletype Operators	92541	Typesetting/Composing Mach Opers
49026	Telemarketers/Door Sales/Rel Workers	91702	Welding Mach Setters/Set-Up Opers
92714	Textile Bleach/Dye Mach Opers/Tenders	91705	Welding Machine Opers/Tenders
92705	Textile Machine Operators/Tenders	53502	Welfare Eligibility Workers
92702	Textile Machine Setters/Operators	92314	Woodwork Mach Opers/Tenders, Exc Saw
92911	Tire Building Machine Operators	92311	Woodworking Mach Setters, Exc Sawing
28311	Title Examiners & Abstractors	55307	Word Processors & Typists

(11) Short-term on-the-job training – In these occupations, workers can generally achieve average job performance in just a few days or weeks working with and observing experienced employees and by asking questions. Occupations in this category are:

53123	Adjustment Clerks	65017	Counter Attendants/Lunchroom/Cafeteria
59999	Admin Support/Clerical Occs, NEC	57311	Couriers & Messengers
53908	Advertising Clerks	53702	Court Clerks
79999	Agric/Forestry/Fishing Workers, NEC	53114	Credit Authorizers
66023	Ambulance Drivers/Attendants, Exc EMTs	53117	Credit Checkers
68014	Amusement/Recreation Attendants	63044	Crossing Guards
79017	Animal Caretakers, Exc Farm	55335	Customer Service Reps, Util
	Assemblers/Fab, Exc Mach/Elec/Prec		Cutters & Trimmers, Hand
68023	Baggage Porters/Bellhops	65014	Dining Room/Cafeteria Attends/Bar Help
53102	Bank Tellers	97117	Driver/Sales Workers
65005	Bartenders	56005	Duplicating Machine Operators
53508	Bill & Account Collectors		Electrical/Electronic Assemblers
55344	Billing/Cost/Rate Clerks	98313	Electricians/Related Helpers
	Billing/Posting Clerks/Mach Opers	67011	Elevator Operators
98311	Brick/Stone Mason Helpers	98323	Extractive Workers Helpers
97111	Bus Drivers, School	73002	Fallers & Buckers
93935	Cannery Workers	79021	Farm Equipment Operators
98312	Carpenters/Related Helpers		Farm Workers, Farm/Ranch Animals
49023	Cashiers		Farm Workers, Food/Fiber Crops
68038	Child Care Workers	55321	File Clerks
98905	Cleaners of Vehicles/Equipment	87608	Floor Sanding Machine Operators
67099	Cleaning/Building Service Workers, NEC	65041	Food Prep/Service Workers, Fast Food
93908	Coil Winders/Tapers/Finishers	65038	Food Preparation Workers
98319	Construction Trades Helpers, NEC	65011	Food Servers
65032	Cooks, Fast Food	65099	Food Service Workers, NEC
65035	Cooks, Short Order	79002	Forest & Conservation Workers
55317	Correspondence Clerks	98799	Freight/Stock/Movers, Hand, NEC
49017	Counter & Rental Clerks	68041	Funeral Attendants



Education Criteria

Appendix B

02011 Clariera Manufacturina	60020 Other Transportation Attendants
93911 Glaziers, Manufacturing	68028 Other Transportation Attendants
79011 Graders/Sorters, Agric Products	98314 Painters/Paperhangers Helpers
93953 Grinders & Polishers, Hand	93947 Painting/Coating/Decorating Workers
63047 Guards	63021 Parking Enforcement Workers
68017 Guides	97808 Parking Lot Attendants
98902 Hand Packers & Packagers	55341 Payroll & Timekeeping Clerks
93999 Hand Workers, NEC	68035 Personal/Home Care Aides
66099 Health Service Workers, NEC	66026 Pharmacy Aides
98999 Helpers/Laborers/Movers, NEC	92908 Photographic Process Mach Opers
87711 Highway Maintenance Workers	98315 Plumbers/Related Helpers
66011 Home Health Aides	93928 Portable Machine Cutters
65002 Hosts/Hostesses: Restaurant/Lounge	57305 Postal Mail Carriers
53808 Hotel/Motel/Resort Desk Clerks	57308 Postal Service Clerks
55314 Human Res Assistants, Exc Payroll/Time	93921 Pressers, Hand
97947 Industrial Truck & Tractor Opers	55326 Procurement Clerks
55332 Interview Clerks, Exc Personnel	58008 Production/Planning/Expediting Clerks
53505 Investigators, Clerical	53911 Proofreaders & Copy Markers
67005 Janitors & Cleaners	63099 Protective Service Workers, NEC
79041 Laborers, Landscaping/Groundskeeping	79033 Pruners
53902 Library Assistants/Bookmobile Drivers	66014 Psychiatric Aides
31505 Library Technicians	53914 Real Estate Clerks
53708 License Clerks	55305 Reception & Information Clerks
53121 Loan & Credit Clerks	98705 Refuse/Recyclable Material Collectors
53111 Loan Interviewers	53805 Reservation & Transport Ticket Agents
79008 Log Graders & Scalers	49011 Retail Salespersons
93902 Machine Assemblers	98316 Roofers Helpers
98502 Machine Feeders & Offbearers	97514 Seamen, Able
67002 Maids & Housekeeping Cleaners	97517 Seamen, Ordinary & Maine Oilers
57302 Mail Clerks, Exc Mail Mach/Postal Serv	97805 Service Station Attendants
56008 Mail Mach Opers, Preparation/Handling	69999 Service Workers, NEC
58021 Marking Clerks	93923 Sewers, Hand
58099 Material Rec/Sched/Distr Workers, NEC	68011 Shampooers
93938 Meat/Poultry/Fish Cutters, Hand	58028 Shipping/Receiving/Traffic Clerks
98102 Mechanic & Repairer Helpers	93917 Solderers & Brazers
58014 Meter Readers, Utilities	53126 Statement Clerks
· · · · · · · · · · · · · · · · · · ·	
92905 Motion Picture Projectionists	98702 Stevedores, Exc Equip Operators
97199 Motor Vehicle Operators, NEC	49021 Stock Clerks, Sales Floor
53705 Municipal Clerks	58023 Stock Clerks: Stockroom/Warehouse
66008 Nursing Aides/Orderlies/Attendants	57102 Switchboard Operators
55347 Office Clerks, General	97114 Taxi Drivers & Chauffeurs
56099 Office Machine Operators, NEC	31521 Teacher Aides, Paraprofessional
55323 Order Clerks	53905 Teacher Aides/Educational Assistants
58026 Order Fillers, Wholesale/Retail	73099 Timber Cutting/Rel Log Workers, NEC



Education Criteria

Appendix B

85953 Tire Repairers & Changers

53108 Transit Clerks

58011 Transportation Agents

53802 Travel Clerks

97102 Truck Drivers, Heavy

97105 Truck Drivers, Light

68021 Ushers/Lobby Attendants/Ticket Takers

79806 Veterinary Assistants

65008 Waiters & Waitresses

68032 Wardrobe & Dressing Room Attends

58017 Weighers/Measurers/Checkers

